**Reflect upon the following questions that focus primarily on your preparation process for completing the project, as well as on your learning.** Some of them may be answered with a simple “yes” or “no” response.

1. Did you underestimate or overestimate the amount of time needed to complete each step involved in the project?

No

1. Did you schedule time each day to work on the project?

Yes

1. Did you review and understand the rubric for the project?

Not until I wrote a different program using a lock and key system to encrypt and decrypt messages did I realize that it was probably not expected of me and would lose me the grade.

1. Did you recheck the rubric before turning in your project? Did you make sure that your project met all the expectations?

Yes

1. What did you find the most challenging aspect of this project? Why?

Visualizing how I wanted to write the code for this, even though I tried working it out on paper, I wasn’t entirely sure. It made me more confident though in my ability.

1. If you got help from someone(s), who helped you? What was the nature of the help?

N/A

1. What did you find the easiest aspect of this project? Why?

The hierarchical decomposition of functions, and the understanding of how to handle and use variables, using them interchangeably as letters and numbers.

1. What do you feel was the most beneficial thing you learned from working on this project? Why?

I think I understood using loops a bit better thanks to this, as well as when there is and when there isn’t a need for if/elif/else statements since I tried my hand at using them in this project as well.

1. What changes could I make to the project that would improve it for future learners? Why?

I liked how it was, it wasn’t the basic “Create a grade calculator” type of program that was expected of us, and I enjoyed working with this. It really helped me understand a few things better than I did before!

1. What did you do differently for this project that you talked about on a previous project reflection paper? (Skip this question for Project 0.)

N/A

And to answer the question from the encoded message,

I didn’t find it too hard, but I did enjoy writing the program. It was pretty fun and I learned an interesting thing about history from it as well; which is how long the concepts of data/information encryption have been around in history.

Final reflection: The program itself wasn’t too difficult to create, I enjoyed writing it and just thinking about how else I could write it. In all honesty, after writing this program however, I’m not sure about other ways to do it, to replicate the exact same results so I’m not sure about my own efficiency for the program. On that note I did create a completely separate program that was doing something similar to what was expected. Originally I created the program and realized that, while it did work, it would probably not be applicable exactly to this project, as it was trying to make use of a lock and key using some math. I am happy with the program working, though if I really had to say, the hardest part about the project was me being stuck for a good 20 mins not realizing that my print statement was on the wrong indentation which was making it print hundreds of different possible outcomes and couldn’t tell.